

REMARKS

In response to the Office Action of September 29, 2010, claims 64, 80 and 109 have been amended. Claims 64-94 and 109 are pending in the application.

In paragraph 4 on page 2 of the Office Action, claim 109 was rejected under 35 U.S.C. §101 because the claimed invention was directed to non-statutory subject matter.

Applicants respectfully traverse the objection to the claims, but in the interest of expediting prosecution has amended claim 109 to overcome the rejection.

In paragraph 6 on page 3 of the Office Action, claims 64-71, 77, 80-87, 93 and 109 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Roth in view of Armbruster and in further view of Bull.

In paragraph 7 on page 8 of the Office Action, claims 72-75, 79 and 88-91 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Roth in view of Armbruster and Bull, and in further view of Sheena.

In paragraph 8 on page 11 of the Office Action, claims 76 and 92 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Roth in view of Armbruster and Bull, and in further view of Eldering.

In paragraph 9 on page 11 of the Office Action, claims 78 and 94 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Roth in view of Armbruster and Bull, and in further view of Park.

Applicants respectfully traverses the rejections, but in the interest of expediting prosecution have amended the claims.

Independent claim 64 sets forth a method that includes anonymously intercepting and capturing each packet received from a Web user having a permanent anonymous user identifier at an Internet Service Provider (ISP) point of presence (POP) prior to each packet from the Web user being routed over the Internet, analyzing each of the intercepted and captured packets to identify packets having headers associated with Web page requests, extracting, at the ISP POP, a Uniform Resource Locator (URL) of the requested Web page and a current IP address of the Web user from the headers identified to be associated with Web page requests, processing the current IP address extracted from the captured headers to correlate the current IP address extracted from the captured headers with a permanent anonymous user identifier using a cross-reference table at the ISP POP, associating each extracted URL with the permanent anonymous user identifier correlated with the current IP address extracted from the captured headers, for each permanent anonymous user identifier correlated with the current IP address extracted from the captured headers, storing the URL of the requested Web page and the permanent anonymous user identifier correlated with the current IP address extracted from the captured headers at the ISP POP, developing a user profile for the permanent anonymous user identifier, at the ISP POP, based on the extracted URLs associated with Web pages stored at the ISP POP and requested by the Web user associated with the permanent anonymous user identifier and cross referencing Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile, at the ISP POP, based on inferred user demographics of the Web sites requested by the Web user

associated with the permanent anonymous user identifier. Independent claims 80 and 109 set forth similar elements.

Roth discloses a system that provides advertisements from an advertisement server in response to a user accessing a web site having an HTML reference to the advertisement server. A cookie is provided by the web site so that the viewing history of the client may be provided to the advertisement server.

However, Roth fails to disclose, teach or suggest anonymously intercepting and capturing each packet received at an Internet Service Provider (ISP) point of presence (POP) prior to each packet from a Web user being routed over the Internet. Rather, according to Roth, the web site returns a cookie to the client. The cookie is then used to track the clients Internet activity. However, users often prefer to disable cookies. If a user decided to disable cookies, Roth would not be able to track the Internet activity of the client.

However, because the independent claims recite that each packet is intercepted, captured and analyzed at the ISP, the client's Internet history may be monitored and maintained.

In addition, the cookie used by Roth is provided when the user accesses a web site over the Internet. The cookie is not provided by the ISP of the user. Thus, Roth fails to suggest the capturing of packets prior to each packet being routed over the Internet.

Further, Roth does not disclose analyzing each of the intercepted and captured packets to identify packets having headers associated with Web page requests. As

asserted above, the web server of Roth merely analyzes the cookie of the client and does not perform any type of analysis prior to each packet being routed over the Internet.

Roth also fails to disclose, teach or suggest extracting, at the ISP POP, a Uniform Resource Locator (URL) of the requested Web page and a current IP address of the Web user from the headers identified to be associated with Web page requests. Roth does not consider the aspect that an IP address of the client may be changed. Thus, Roth does not suggest extracting a current IP address from headers of a request prior to each packet being routed over the Internet.

Roth also fails to disclose, teach or suggest processing the current IP address extracted from the captured headers to correlate the current IP address extracted from the captured headers with a permanent anonymous user identifier using a cross-reference table at the ISP POP. Again, Roth does not contemplate that the IP address of the client may change and that the transient IP address of the client may need to be correlated with a permanent anonymous user identifier.

Roth also fails to disclose, teach or suggest associating each extracted URL with the permanent anonymous user identifier correlated with the current IP address extracted from the captured headers. Again, Roth does not suggest correlating an obtained IP address of the client with a permanent anonymous user identifier.

Roth further fails to disclose, teach or suggest cross referencing Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile, at the ISP POP, based on inferred user demographics of the Web sites requested by

the Web user associated with the permanent anonymous user identifier. Roth simply fails to recognize the need to cross reference Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile.

Thus, Roth fails to disclose, teach or suggest the invention as defined in new independent claims 64, 80 and 109.

Armbruster fails to overcome the deficiencies of Roth. Armbruster discloses that a content provider can control and monitor access to its site. However, claim 1 sets forth monitoring packets at an Internet Service Provider (ISP) point of presence (POP). The content provider is not an ISP POP. Thus, Armbruster fails to suggest monitoring packets at an Internet Service Provider (ISP) point of presence (POP).

Furthermore, Armbruster is completely silent regarding anonymously intercepting and capturing each packet received at an Internet Service Provider (ISP) point of presence (POP) prior to each packet from a Web user being routed over the Internet.

In addition, Armbruster fails to suggest the capturing of packets prior to each packet being routed over the Internet.

Further, Armbruster does not disclose analyzing each of the intercepted and captured packets to identify packets having headers associated with Web page requests. Rather Armbruster merely discloses that if requested data is not present at a local caching unit, a connection is established with the central caching unit over the network to retrieve the requested data over the wide area network.

Armbruster also fails to disclose, teach or suggest extracting, at the ISP POP, a Uniform Resource Locator (URL) of the requested Web page and a current IP address of the Web user from the headers identified to be associated with Web page requests. Armbruster does not consider the aspect that an IP address of the client may be changed. Thus, Armbruster does not suggest extracting a current IP address from headers of a request prior to each packet being routed over the Internet.

Armbruster also fails to disclose, teach or suggest processing the current IP address extracted from the captured headers to correlate the current IP address extracted from the captured headers with a permanent anonymous user identifier using a cross-reference table at the ISP POP. Again, Armbruster does not contemplate that the IP address of the client may change and that the transient IP address of the client may need to be correlated with a permanent anonymous user identifier.

Armbruster also fails to disclose, teach or suggest associating each extracted URL with the permanent anonymous user identifier correlated with the current IP address extracted from the captured headers. Again, Armbruster does not suggest correlating an obtained IP address of the client with a permanent anonymous user identifier.

Armbruster further fails to disclose, teach or suggest cross referencing Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile, at the ISP POP, based on inferred user demographics of the Web sites requested by the Web user associated with the permanent anonymous user identifier. Armbruster simply fails to recognize the need to cross reference Web site profiles of Web

users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile.

Thus, Roth and Armbruster, alone or in combination, fail to disclose, teach or suggest the invention as defined in independent claims 64, 80 and 109.

Bull fails to overcome the deficiencies of Roth and Armbruster. Bull is merely cited as disclosing that the user's web viewing patterns are monitored and matched against software text agents to match a profile including user demographics. According to Bull, during a session or after a user discontinues use, the data viewed (recorded in the browsing activity datastore 240) is analyzed by the session profile update 2921 and the user profile datastore 210 is updated with keywords or personal search text agent datastore 232.

Accordingly, Bull merely creates a profile based on a user's viewing patterns. However, Bull fails to disclose anonymously intercepting and capturing each packet received at an Internet Service Provider (ISP) point of presence (POP) prior to each packet from a Web user being routed over the Internet. In addition, Bull fails to suggest the capturing of packets prior to each packet being routed over the Internet.

Further, Bull does not disclose analyzing each of the intercepted and captured packets to identify packets having headers associated with Web page requests. Rather Bull merely discloses that a user logs on to a system and that only then is the user's activity is tracked.

Bull also fails to disclose, teach or suggest extracting, at the ISP POP, a Uniform Resource Locator (URL) of the requested Web page and a current IP address of the Web

user from the headers identified to be associated with Web page requests. Bull does not consider the aspect that an IP address of the client may be changed. Thus, Bull does not suggest extracting a current IP address from headers of a request prior to each packet being routed over the Internet.

Bull also fails to disclose, teach or suggest processing the current IP address extracted from the captured headers to correlate the current IP address extracted from the captured headers with a permanent anonymous user identifier using a cross-reference table at the ISP POP. Again, Bull does not contemplate that the IP address of the client may change and that the transient IP address of the client may need to be correlated with a permanent anonymous user identifier.

Bull also fails to disclose, teach or suggest associating each extracted URL with the permanent anonymous user identifier correlated with the current IP address extracted from the captured headers. Again, Bull does not suggest correlating an obtained IP address of the client with a permanent anonymous user identifier.

Bull further fails to disclose, teach or suggest cross referencing Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile, at the ISP POP, based on inferred user demographics of the Web sites requested by the Web user associated with the permanent anonymous user identifier. Bull simply fails to recognize the need to cross reference Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile.

Thus, Roth, Armbruster and Bull, alone or in combination, fail to disclose, teach or suggest the invention as defined in new independent claims 64, 80 and 109.

Sheena fails to overcome the deficiencies of Roth, Armbruster and Bull. Sheena is merely cited as disclosing the use of an averaging algorithm to calculate a similarity factor between a pair of users. According to Sheena, the similarity between a pair of users may be calculated by averaging the squared difference between their ratings for mutually rated items. Thus, the similarity factor between user x and user y is calculated by subtracting, for each item rated by both users, the rating given to an item by user y from the rating given to that same item by user x and squaring the difference. The squared differences are summed and divided by the total number of items rated.

However, Sheena does not disclose the above-described functions occurring at an Internet Service Provider (ISP) point of presence (POP). Sheena does not even address the intercepting, capturing and analyzing packet headers prior to a client's packets are routed over the Internet. Sheena also fails to suggest associating each extracted URL with the permanent anonymous user identifier correlated with the current IP address extracted from the captured headers. Sheena further fails to disclose, teach or suggest cross referencing Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile, at the ISP POP, based on inferred user demographics of the Web sites requested by the Web user associated with the permanent anonymous user identifier. Sheena simply fails to recognize the need to cross reference Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user

associated with the permanent anonymous user identifier to generate an updated user profile.

Thus, Roth, Armbruster, Bull and Sheena, alone or in combination, fail to disclose, teach or suggest the invention as defined in new independent claims 64, 80 and 109.

Eldering fails to overcome the deficiencies of Roth, Armbruster, Bull and Sheena. Eldering is merely cited as disclosing the generation of a profile based on the purchase history of a consumer. To preserve privacy, Eldering discloses the records of Web sites a user has visited are erased after developing the user's profile. More specifically, Eldering discloses maintaining consumer privacy via private data networks.

However, Eldering does not disclose the above-described functions occurring at an Internet Service Provider (ISP) point of presence (POP). Eldering does not even address the intercepting, capturing and analyzing packet headers prior to a client's packets are routed over the Internet. Eldering also fails to suggest associating each extracted URL with the permanent anonymous user identifier correlated with the current IP address extracted from the captured headers. Eldering further fails to disclose, teach or suggest cross referencing Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile, at the ISP POP, based on inferred user demographics of the Web sites requested by the Web user associated with the permanent anonymous user identifier. Eldering simply fails to recognize the need to cross reference Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web

user associated with the permanent anonymous user identifier to generate an updated user profile.

Thus, Roth, Armbruster, Bull, Sheena and Eldering, alone or in combination, fail to disclose, teach or suggest the invention as defined in new independent claims 64, 80 and 109.

Park fails to overcome the deficiencies of Roth, Armbruster, Bull, Sheena and Eldering. Park is merely cited as disclosing the transmitting of pop-up and banner advertisements to a display of a computer operated by the user.

However, Park does not disclose the above-described functions occurring at an Internet Service Provider (ISP) point of presence (POP). Park also does not disclose associating each extracted URL with the permanent anonymous user identifier correlated with the current IP address extracted from the captured headers. Park further fails to disclose, teach or suggest cross referencing Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile, at the ISP POP, based on inferred user demographics of the Web sites requested by the Web user associated with the permanent anonymous user identifier. Park simply fails to recognize the need to cross reference Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile.

Thus, Roth, Armbruster, Bull, Sheena, Eldering and Park, alone or in combination, fail to disclose, teach or suggest the invention as defined in new independent claims 64, 80 and 109.

Dependent claims 65-79 and 81-94 are also patentable over the references, because they incorporate all of the limitations of the corresponding independent claims 64 and 80, respectively. Further dependent claims 65-79 and 81-94 recite additional novel elements and limitations. Applicants reserve the right to argue independently the patentability of these additional novel aspects. Therefore, Applicants respectfully submit that dependent claims 65-79 and 81-94 are patentable over the cited references.

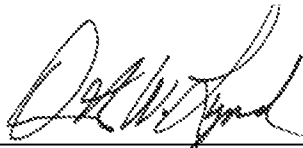
On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 865-380-5976. If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 13-2725 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

Merchant & Gould
P.O. Box 2903
Minneapolis, MN 55402-0903
(865) 380-5976



By: 
Name: David W. Lynch
Reg. No.: 36,204